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LECTURES.

THE COMMUNICABLE FEVERS AND THEIR TREATMENT.¹

A LECTURE DELIVERED AT BELLEVUE HOSPITAL, NEW YORK.

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I.

GENTLEMEN, — All the exanthemata have features in common, which render their treatment somewhat similar; and this circumstance also facilitates their study. Hence in investigating them from a therapeutical point of view, there are certain general principles which the student ought to master before he proceeds to devote his attention to the treatment of the special diseases grouped under this class. Let me now, therefore, ask you to notice two or three points, which should always be borne in mind in this connection.

In the first place, it is impossible for us to cut short the course of these diseases, and no method of treatment is capable of curing them. Hence you should never lose sight of the fact that your patient must necessarily remain sick for a certain number of days, do what you will; and it is very important that you should be fully impressed with the truth of this at the very outset of your study of medicine. It is the complications of such affections which afford the field in which the skill of the physician is to display itself. Each one has its special complications, and of course, in order that you may be able to deal with these successfully, you should be thoroughly posted in regard to them.

Again, these specific affections are not like rheumatism, gout, or any form of disease which is generated in the body, but are peculiar in the fact that they are all derived from extraneous sources. Moreover, each has its own laws of origin, development, communicability, etc.; and in considering the group, both in general and in particular, I would suggest that you should always keep before your minds the ideas connected with the word *seed*, as I think this will serve to give you the clearest comprehension of the subject.

¹ Reported for the JOURNAL.

Each seed, as you know, has its own time for incubation, its own time for development, and its own time for getting through these developments. Then comes reproduction, and, lastly, we have the fact that the plant as a rule (and especially in the lower forms of vegetable life, such as the fungus) cannot grow again in the same soil. None of you, I think, can fail to be struck with the resemblance which all this has to the characteristics of the diseases in question. While dwelling upon this point, let me give you a word of warning, and that is to beware of incautiously claiming to have had extraordinary success in the treatment of any of these affections. Every kind of crop, you must remember, varies according to many different circumstances, and so it is with such diseases. The same ones have peculiar ways of behaving in certain years, owing to special conditions. Thus scarlatina may one season be characterized by very severe nephritis, and the next may be accompanied by scarcely any. Last year, for instance, I saw more nephritis in connection with it than ever before; while this year, although the disease has been exceedingly prevalent, the renal complication has not been nearly so marked. So in typhoid fever, intestinal hæmorrhage is in some years a prominent feature, and in others it is not; while all the books will tell you that in some seasons this, as well as other diseases, is of a very grave type, and in others of but little severity.

Another point of importance is that it is not from the seed that you will be able to judge of what kind of result is to be expected, but from the character of the soil in which it becomes implanted. One indisputable fact is that as in the vegetable world a great many seeds fall by the way and come to nothing, so in every community that is attacked by any epidemic a great number of individuals will escape entirely, because they do not offer an appropriate soil for the disease germ to develop in. Even before the discovery of the preventing power of vaccination, small-pox did not attack a very large proportion of the white race, at least in localities where it prevailed, and yet this is the most contagious of all diseases. So many persons escape scarlatina, typhoid fever, and other similar diseases when they are prevalent; and hence we conclude that the kind of soil which a patient presents is always to be taken into consideration.

Now as to the matter of treatment. Since I have been practicing medicine I have had a larger experience with these fevers than with any other kind of disease. Thus at the outset of my medical career (in Syria) I had about one thousand such cases a week to look after for two years. Of course, it was far too large a number to study with advantage; and this over-abundance of cases, I may remark in passing, is one of the snares of hospital practice. As there were too many to do justice to, I used to select a certain number of suitable patients upon

whom to test various special plans of treatment, and then leave the rest to a kind Providence, chlorate of potash, and milk diet. In other words, I simply adopted the expectant method of treatment in the great majority of instances. No one, I believe, who has had much experience with these diseases will ever attribute any special success to any peculiar plan of procedure, unless he takes into consideration (1) the characteristics of the epidemic in the particular year in which his cases occur, and (2) the inequality of the disease, as regards severity, etc., in different cases. The seed bears fruit according to the character of the soil in which it falls.

This brings me to speak of the feature, which sometimes characterizes the continued fevers, known as *malignity*, and it is a most important one. In most epidemics of small-pox, scarlatina, and the rest there are certain cases which we designate as malignant, and in which the patients really seem to begin to die before any treatment can have its effect upon them.

Now, what do we mean by the term malignant? Is this malignity distinct in different diseases, and presenting special indications in each, so that there can be no general rule in reference to treatment? Fortunately, this is not the case. One thing is common to all malignant cases, whatever the variety of the disease, and that is *septicæmia*.

If we once understand this, the matter becomes greatly simplified. In plain terms, then, the bad cases in all these affections are due to the development of a poison in the blood, and *septicæmia* means the genesis in the system of a specific poison, which acts with greater or less force according to the dose present. A poison, you must remember, is a different thing from a virus, which really belongs to the *seed*. A poison in sufficiently large doses will kill, while in smaller ones it causes certain injurious effects short of this, as is seen in the case of alcohol, for instance; but there is no such thing as a dose of a virus. Again, time is required for a virus to pass through various stages; while a poison, on the other hand, acts instantaneously, and according to the quantity introduced into the system. It is, in fact, a chemical agent. *Septicæmia* is a condition which is generated in the system. Its poison has been separated or distilled from the body and used for the purpose of inoculation, and the effects produced by it have been found to correspond with the amount inoculated. The discoveries concerning *septicæmia* have proved a very important advance in medicine, and we are indebted for them largely to Burdon Sanderson in England and certain distinguished investigators in Germany.

Next let us inquire just what this poison does when present in the system. It has been found that it has a chemical action, and causes a precipitation of fibrin. In consequence of this, a more or less complete paralysis of nerve centres (and especially the ganglionic) is produced,

and from this results paralysis of muscular structures, like the heart, for instance. Hence those adynamic symptoms met with in certain cases of all these fevers are all similar in character, and are all accompanied by definite lesions which can be readily recognized after death. Physiologists have now determined that there is no such thing as fibrin in the blood in health; so that when it is present during life it is always pathological. It may also occur as the result of post-mortem change, or in blood that has been drawn from the living subject (after its separation from the body). In septicæmia, however, there is a real disorganization of the blood, and, in consequence, an ante-mortem formation of fibrin in the system.

Now since septicæmia is the cause of the majority of deaths in the continued fevers, the indication is undoubtedly to treat them by means of antiseptics given internally, so as to prevent its occurrence. At the present time the whole profession is working in this direction, — the aim being, not to cut short the disease, but to avoid what are commonly known as typhoid symptoms. The remedies most useful in the accomplishment of this end are chlorine, permanganate of potassium, chlorate of potassium, and bromine. My own opinion is that this prevention of septicæmia is the main indication in the treatment of these fevers. Hence I do not trust to the expectant plan, but adopt a decided course from the very commencement of the attack. I believe that bromine is the most powerful antiseptic that can be taken into the blood, and I am in the habit of employing it in large quantities. Labarracque's solution is also an excellent remedy for the purpose mentioned. The carbolic acid group of agents, on the other hand, is of no service whatever in this respect. Therefore, even for disinfecting the apartment of the patient, I would greatly prefer preparations belonging to the chlorine group, which I have seen act efficiently in many instances, while I have never seen the other class have the slightest effect in preventing the spread of disease. I have recently had in my practice an instance in which the usefulness of bromine in this capacity was admirably shown. In a family in which there were eight children, besides a number of adults, two of the children were taken in one day with scarlet fever, both having been exposed to the same infection at the same time. None of the other children had ever had the disease, and the same was the case with their governess. The two sick ones I had placed in a back room on the second floor, and from the first employed bromine as my only disinfectant. Smith's solution was the form in which it was used, and I had this put in every room in the house and all the halls, exposed in shallow saucers. The mother attended the sick children herself, and did not leave their chamber. No other member of the family took scarlatina, but in a short time I found, to my horror, that one of the six unaffected children was ill with diphtheria. I therefore

expected that all the others would be attacked, but, fortunately, this was not the case. One other of the six took it, and that was all. Both diphtheria patients were put upon the bromine treatment, and both recovered.

It has been frequently noticed that scarlatina and diphtheria are very apt to prevail together, and it has been found that when the latter ensues upon the former in the same individual the case is always very serious. During the present year I have often seen the two diseases in the same house at the same time; but in the instance now under consideration the diphtheria never crossed to the scarlatina, or the reverse. The only other individual in the family, beside the two children mentioned, who took scarlet fever was a laundress, who had had the disease before, and therefore considered herself proof against it. Her attack was a very light one. The above narrative therefore exhibits very strikingly, I think, the efficiency of bromine as an antiseptic agent.

The carbolic acid group acts admirably wherever there is any purulent matter to be dealt with; but in the diseases in question the chlorine group, as I have previously remarked, is far the most serviceable. In the year 1866 chlorine unquestionably put a stop to an epidemic of cholera in the work-house on Blackwell's Island. There are other agents, like quinine, salicylic acid, etc., which are poisonous to septicæmic action; but they also destroy life if given in sufficient quantities to effectually accomplish the desired end. The action of chlorine and its congeners is wholly different from that of the above, being entirely chemical in its nature, and directly due to the marked affinity which this group possesses for hydrogen. In the process which goes on a considerable quantity of oxygen is set free, and this in its nascent state is also an excellent antiseptic.

Now how shall we give bromine internally? The best way is in the form of Smith's solution. From four to eight drops of this to a fluid drachm of water should be administered in about half an ounce of sweetened water. One great advantage that it has over many other agents is that it does not at all disturb the stomach; and I have seen this demonstrated over and over again in cases of diphtheria. When all other remedies were vomited, the bromine solution would be retained, — at least after the first or second dose. The principal difficulty about giving bromine or chlorine is that they are so sharp to the taste. Hence they should be well diluted, and their acidness disguised by sweetening. This sweetening should not be ordered to be compounded with the prescription, as such a mixture will not keep, but ought to be added at the time of administration. When Labarracque's solution is used, it should be given in doses of half a drachm to a drachm, mixed with half an ounce or an ounce of sweetened water or milk, every two

or three hours. It answers quite well in diphtheria and scarlet fever, but in my opinion is inferior to the bromine. The chlorinated water of the United States Pharmacopœia often serves a good purpose, and is especially useful in typhoid fever. This kind of treatment should be adopted from the beginning, because you never can tell beforehand whether you are going to have a septicæmic case to deal with or not.

I will next speak briefly of the local manifestations in these diseases, and particularly in diphtheria. For the treatment of membranous deposits in the fauces there is nothing at all equal to the pumping of water into the throat in large quantities; of course, allowing it to run out again all the time. The best instrument for doing this is the ordinary Davidson's syringe. Children are sometimes a little frightened at the method at first, but soon get accustomed to it. It is advisable in such cases to turn the nozzle first against the cheek, and then gradually upon the back of the throat. As soon as they have gotten used to it the little patients are anxious to have it kept up as long as possible, as the measure is exceedingly grateful to them. Unless there are membranes upon the back part of the tonsils, it is far superior to any form of gargle or other local application. I now recall a case of typhoid fever in this hospital in which there was a diphtheritic complication, which I have not the slightest doubt was brought to a successful issue by means of this agency. When the method was commenced the man's throat was already beginning to be necrotic, and he was altogether in a very critical state. The water pumping, however, was kept up regularly until all signs of diphtheria had almost or entirely disappeared, after which he made a good recovery. This procedure is a thing that the friends of the patient can easily carry out, and I am convinced that it is of the greatest possible service. In diphtheria I would recommend that at first a considerable quantity (say a pint) of an infusion of some very light astringent should be pumped into the fauces, and very weak black tea, flavored with a little peppermint, for instance, is one of the best that can be used. After this a pint of lime-water may be employed in the same way, and finally another pint of the tea. Then the whole can be repeated as often as necessary. Lime-water is not only an excellent disinfectant, but has also the property of dissolving the membranes. It can always be produced by home manufacture, and the easiest thing to make it with is oyster shells. A special advantage of this method of irrigation is that with it there is no danger of doing any injury to the mucous membrane, which is always a serious matter in diphtheria, as it is almost sure to result in an extension of the membranes.

In suitable cases, where the patient is old enough, bromine may be applied directly to the membranes three times a day in the form of Smith's solution, either pure or diluted with an equal quantity of glyc-

erine. A better way in adults, however, is to apply the bromine by means of a bulb medicine dropper, which you will find a very convenient method, as it enables one to carry the solution to any spot desired more readily than in any other way. The best instruments for the purpose are those curved at the end.

THE EVIDENCE OF STILL-BIRTH.¹

BY MEDICAL EXAMINER S. W. ABBOTT, M. D.

(II.) *Spontaneous or Congenital Emphysema.* This condition can hardly be said to have been clearly proved in any single case, unless those of Chaussier may be termed emphysema. But in his cases, which were apparently the effect of severe and artificial labor, the presence of an experienced obstetrician is implied, which would exclude them from the domain of the medical examiner.

Schmitt's case is doubtless one of putrefaction ; so also that of Meyn ; while in that of Michaelis there is no reasonable evidence that the child was still-born. In addition to these cases, Casper in his late editions gives special notice to that of Hecker, in which both lungs floated in water, without a trace of putrescence. This case is one of the most noteworthy on record, as being one where all the conditions of intra-uterine respiration were present, namely, an early rupture of the membranes, a tedious labor, and frequent examinations of the os uteri, thereby admitting air freely to the womb.²

After a careful review of all these cases, Casper cautiously lays down the following principle as a modification of a previous one : "*That not one single, well-observed, and incontestable case of emphysema, developing itself spontaneously within the lungs of a fœtus born without artificial assistance, is known ; and it is not therefore permissible in forensic practice to ascribe the buoyancy of the lungs of new-born children brought forth in secrecy and without artificial assistance to this cause.*"

(III.) *Putrescence.* It cannot be denied that fœtal lungs may become buoyant from this cause, but it is also true that the diagnosis between the appearance of lungs that have breathed and those in which gas is developed by putrescence is a matter presenting little difficulty to an expert.

In the first place, observation shows that the lungs resist putrefaction longer than the brain, the liver, the spleen, the stomach, or the intestines. If, then, putrescence is not present in these organs, we may infer that the floating of the lungs is not due to this cause. The phenomena of putrescence begin by the appearance of gaseous vesicles or

¹ Concluded from page 301.

² For other cases of vagitus uterinus, see Edinburgh Medical and Surgical Journal, vol. xxxiii., page 215, and London Lancet, July, 1834.

bullæ of small size on the serous surface of the lungs. These are followed at a later period by a loss of lustre in the serous covering and a dark gray color, with putrid odor. The more advanced the stage of decomposition the more difficult is the process of distinguishing between fetal lungs and those which have respired, when both have become buoyant from putrescence.

In one of my own cases (VII.) the right lung was found to fill the pleural cavity, the left not so completely; the right was bright red, the left reddish-purple; both were crepitant, and studded with bullæ of decomposition on their serous surface. These vesicles were carefully punctured, and the lungs readily floated in water. In this case the brain had entirely disappeared, and the stomach and a portion of the intestines had become an undistinguishable mass.

In this connection the experiments of a recent Italian observer, Professor Gioranardi, are worthy of note. His conclusions are as follows:—

(1.) The lungs of a child which has breathed sink in water if allowed to remain eleven or twelve days immersed in it.

(2.) When the entire body of a child which has breathed is placed in water, the chest being closed, the lungs will continue to float up to their entire destruction by putrefaction. When the cavity of the chest is opened so that the water may have free access to the lungs, the lungs will sink after fifteen or twenty days' immersion of the body.

(3.) When the body of a new-born child is found cut to pieces, the chest opened, and the lungs exposed (to the action of water?), an expert must not infer that the child has not breathed because the lungs sink in water.

(4.) By drying the lungs, an expert may determine whether the sinking in water is due to their *not* having breathed. If they have breathed and have been several days immersed in water, they will float after drying. If they have not breathed, they will in the dried state again sink.

(5.) In reference to this condition, an expert may sometimes form an approximate judgment of the time which has elapsed since the death of the new-born child. Spontaneous submersion takes place in eleven to fifteen days, and some days earlier if breathing has been imperfect, or if the lungs are cut in pieces, or are in a putrefied state.¹

It should be stated that these conclusions appear to be derived from observations on five cases only, and are therefore not well enough established to be admitted as principles in forensic practice. Professor Gioranardi promises another paper based on more extended observations.

Having noticed those objections which relate to the floating of un-respired lungs, let us briefly consider the opposite class, those which relate to the sinking of lungs which have respired. Lungs of a new-

¹ Rivista sperimentale de Med. legale, 1877.

born child which have once breathed may sink from the following causes:—

(I.) *Imperfect Respiration.* In a case of this sort some portions of the lung will be found to float, if it be cut to pieces and each part be tested.

(II.) *Suffocatory Hyperæmia and Hepatization.* In both these instances, as before, some fragments will be found to float. If incisions be made into the lungs and they be deprived of their blood by pressure, they may be made to float, while no amount of pressure will make fetal lungs float. The incisions should be made beneath the surface of the water, and in the case of lungs which have breathed air bubbles will be disengaged and rise to the surface.

Cases of either sort, however, are so rare that but a few isolated instances can be found recorded among the writings of forensic physicians of the largest experience.

Evidence derived from the Circulatory Organs. The closure and obliteration of the foramen ovale, the ductus arteriosus, the ductus venosus, and the umbilical vessels are facts of greater interest to the physiologist than to the medical examiner, since some of these ducts, if not all, must of necessity be found pervious in all new-born infants. Their closure usually takes place in from one day to three weeks or more, and generally in the following order: first the umbilical vessels, then the ductus venosus, the ductus arteriosus, and lastly the foramen ovale. In accordance with these facts, the examination of these vessels at the medico-legal dissecting table is no longer required by the Prussian code.

Almost the only inference of value which can be drawn from them is as follows: if they be found closed, the child has probably been born alive, but their patent condition is no proof that it was born dead.

Abdominal and Pelvic Organs. It is hardly worth noticing that the full bladder and rectum were once held as proof of still-birth. But even the most careless observer must know that both may be evacuated into the liquor amnii before birth. We should not, however, neglect an examination of these organs, and the same should be said of the stomach and colon. The presence of starch, sugar, milk, and other foreign material in the stomach, and of any faecal matter other than meconium in the colon, would lend weight to the hydrostatic test in establishing the fact of live birth.

Both the absolute and the relative weight of the liver have been proposed as tests of live and still birth, based upon the fact of its decrease in weight after the birth of the child. But the diminution in size is so gradual and the variations in absolute size so great, as shown by the observations of Professors Bernt, Elsässer, and Orfila, that no reliance can be placed upon it as a test. Both the Prussian and the Aus-

trian regulations ignore it, and Casper condemns it as unworthy of the slightest consideration.

In conclusion, the medical examiner may infer that a child has lived during and after its birth : —

- (1.) When the diaphragm reaches only to the fifth intercostal space.
- (2.) When the lungs more or less completely fill the thorax.
- (3.) When the ground color of the lungs is broken by insular marblings.
- (4.) When, by careful experiment, the lungs are found to be capable of floating.
- (5.) When a bloody froth exudes from the cut surfaces of the lung on slight pressure.
- (6.) When the air cells are visible to the naked eye.

These proofs, complete as they are, may be strengthened by the cicatrization of the umbilicus, the scaling of the epidermis, the closure of the fetal ducts, the size of the osseous nucleus of the inferior femoral epiphysis, the existence of milk, sugar, starch, or medicines in the stomach, determined by the appropriate chemical tests, and by the presence of faecal matter other than meconium in the lower intestines.

ANATOMICAL EVIDENCES OF ABORTION.¹

BY MEDICAL EXAMINER C. C. TOWER, M. D.

MEDICO-LEGALLY regarded, the term abortion is not restricted in its signification, as in obstetrics, to the expulsion of the contents of the gravid womb previous to the close of the sixth or the commencement of the seventh month, — the limits of the period variously assigned for the viability of the foetus, — but is applied indiscriminately to all cases in which pregnancy is terminated before the expiration of the full term.

The appearances on dissection will obviously differ very much according to the character of the abortion, whether natural or violent ; the period of pregnancy at which it occurred ; and the length of time which has elapsed since it took place. I shall confine my attention to the appearances after death shortly following criminal abortion. Externally the body would of course present similar indications to those existing before death. Many obstacles, however, which interfered with a full and careful physical examination when the woman was living are now wholly removed. Changes due to pregnancy, which are manifest in the form, size, color, and consistency of the breasts and abdomen, are sometimes quite striking, and at once impress the examiner very decidedly in respect to the conditions which may be found to exist internally. Such was my own experience when, years ago, a

¹ Read before the Massachusetts Medico-Legal Society, June 10, 1879.

young practitioner, I was called upon to conduct an examination of the body of the victim in the "Hersey murder" case, the young woman having died from strychnia poisoning, and her womb containing a three months' fœtus.¹ After the contents of the womb have been expelled, however, the changes attending involution are often so rapid that unless the fatal follows the abortient act in quick succession many of the proofs of the event, both externally and internally, obtained from the autopsy are either wholly wanting or of doubtful reliability.

After criminal abortion we often find the external genitals swollen, turgid, ecchymosed, and separated by clots of blood proceeding from the vagina. Discolorations, bruise-marks, and other indications of injury not infrequently appear on various parts of the body, some of which may have been produced after death. But marks of violence externally or internally would furnish no absolute proof of miscarriage, but merely point to a probable cause if proof were discovered. If the use of drugs be suspected, the presence of abortifacient medicines in the alimentary canal would confirm the suspicions previously entertained that attempts to procure abortion had been made in this manner. The specific toxical effects of such medicinal substances should be sought for only on account of their supposed causative agency through reflex influence. Among the effects to be looked for may be mentioned rectal engorgement from irritant purgatives, of which aloes and hellebore are chief, and renal congestion from powerful diuretics, such as savine and tansy.

Positive proof of abortion obtained at the autopsy must, however, be limited to the *signs of recent delivery found in the uterus itself and in its appendages, notably the ovaries*. In ovular abortion no reliable evidences can be discovered from an examination of these organs. The appearances would be almost identical with those dependent upon menstruation. The general character of them would be such as is due to sanguineous engorgement. "During menstruation," says Orth, "the uterus is enlarged (to the size of a hen's egg); its substance is soft and juicy; the mucous membrane is swollen, succulent, reddened from the engorgement of the blood-vessels, and covered with a more or less pure or watery blood, according to the duration." The now generally accepted view of menstruation is that during the physiological turgidity of the uterus which attends ovulation the net-work of capillaries which surrounds the utricular glands situated in the mucous membrane becomes deeply injected, and an exfoliation of the epithelial lining of the uterine cavity takes place, laying bare the ruptured walls of the minute vessels from which an exudation of blood occurs. We can readily conceive that the interior of the uterus after an early abortion, especially

¹ Report of the Case of George C. Hersey, indicted for the Murder of Betsey Frances Tirrell. A. Williams & Co. 1862.

if the decidua had been expelled with the ovum, would present appearances very like what must exist in the unimpregnated organ during the occurrence of the phenomena just described. If, on the other hand, the decidua had been retained, its membranous shreds could not be readily distinguished from patches of dysmenorrhœal casts. If the blood within the cavity of the womb be clotted, that circumstance would be suggestive that abortion had recently occurred; but menstrual blood is by no means destitute of the property of coagulation, although it coagulates with difficulty if the function is normally performed. If the flow is profuse, as in menorrhagia, it clots readily.

The extreme vascular condition of the ovaries and Fallopian tubes during menstruation and early pregnancy would be essentially the same, and, consequently, also in early abortion. Even in the Graaffian follicles no changes diagnostic of abortion during the first month of pregnancy could be discerned, their ruptured walls and contained coagula merely indicating that ovulation had recently been going on, and that the process was completed by the discharge of ova.

When abortion occurs at the middle period of pregnancy reliable evidences of the event can usually be detected. These consist in characteristic appearances of the interior of the womb, in alterations in the size, structure, form, and weight of that organ, and in the development of a corpus luteum of pregnancy in one or both of the ovaries. The cavity of the uterus at this period will be found to contain clots of blood or sanguineous fluid, and its surface to be covered with flocculent or pulpy remains of the decidua. The site of the placental attachment — one of the most unequivocal signs of recent delivery — is indicated by a dark brownish, somewhat elevated patch, the surface of which is described as rugous, unequal, and disorganized or actually suppurating. It also presents "several large, semilunar or valvular openings," — the remains of uterine sinuses, — and is further distinguished by the "small number of flocculi" compared with that of the adjacent surface. If portions of the placenta remain attached, they may be recognized under the microscope by the peculiar structure of that organism.

If abortion occurred at any time during the last three months of gestation, the usual signs of delivery at term would be more or less manifest. The external evidences already alluded to would be more unequivocal. On account of the greater size of the fœtus we should expect to find more marked traces of recent birth at the outlet, as indicated by increased swelling and turgescence of the labia, and perhaps by fresh laceration of the posterior fourchette. If forceps or other instruments to aid delivery had been employed, marks of injury to the soft parts, even rupture of the perinæum, might be discovered. Internally, the greater dilatation of the vagina, the more open state of the cervix, the larger size of the womb, the more extensive traces of pla-

cental attachment, and the more copious coagula would leave no opportunity for doubt concerning the occurrence of the recent event. Marks of internal violence, such as punctures or incisions of the uterine walls, could hardly be mistaken at any stage of pregnancy for lesions in the unimpregnated organ caused by operative surgical interference in the removal of morbid growths. "An important point in the diagnosis of a recent labor at full term, or of a premature labor," says Orth, "is an orange discoloration of the mucous membrane of the neck of the uterus, which is often present."

Considerable conflict of testimony seems to prevail among authorities with regard to the existence of the mucous membrane of the uterus, not only after abortion, but also after delivery at the full period. The doctrine enunciated by M. Cruveilhier, and concurred in by Professor Simpson and many other distinguished writers on obstetrics and gynaecology, is that after normal delivery, "except just at the inner surface of the cervix uteri, there is no mucous membrane at all, but the muscular tissue is everywhere exposed." According to this view, the decidua is entirely expelled with the foetal membranes and placenta during the third stage of labor, leaving the inner surface of the uterus denuded, but "to be covered by a new membrane" during convalescence. The distinguished physiologist, M. Robin, while agreeing with M. Cruveilhier that the original mucous membrane is converted into decidua and thrown off at the termination of labor, promulgated the new doctrine that the muscular tissue is not wholly laid bare, but is covered with a delicate layer of newly formed mucous membrane which has been developing during the latter half of gestation. Dr. Priestley, in his admirable *Lectures on the Development of the Gravid Uterus*, substantially agrees with M. Robin concerning the formation of a new mucous membrane during the last months of pregnancy, but cannot concede that the decidua is entirely removed at the time of delivery. From his personal researches in the human subject he deduces the following conclusions concerning the uterine mucous membrane during and immediately following pregnancy:—

(1.) "After an ordinary labor, terminating in the separation and expulsion of the secundines, the muscular substance of the uterus is nowhere laid bare. . . .

(2.) "When the membranes are thrown off in the third stage of labor, a portion of the decidua remains attached to the uterine surface as a protection against external agencies. It is not, however, strictly correct to assert that the original mucous membrane may be found everywhere lining the interior of the uterus after delivery; that is true only with regard to the cervix. . . .

(3.) "A new mucous membrane begins to be formed in the later months of pregnancy between the decidua and muscular coat. It undergoes a rapid development after the uterus is emptied of its contents;

and as it is gradually perfected it assumes the function of the original mucous coat."

Leishman, in his *System of Midwifery*, appears to contradict himself somewhat on this point. In one place he declares that "the separation of the whole mucous membrane of the uterus under the name of *decidua* . . . always occurs . . . in women at the moment of delivery."¹ He also speaks of "the exfoliated membrane, and the raw, bleeding surface which its removal necessarily involves . . . in women who have died shortly after delivery."² Elsewhere, in describing the puerperal condition of the inner surface of the cavity of the womb, he asserts that "remains of the decidua vera or of the subjacent textures from which it has been stripped are clearly to be made out."³ On the whole, he seems to adopt the views advocated by M. Robin.

Still different opinions are maintained by other observers. They are, however, mostly modifications of those already given. Dr. Matthews Duncan, for example, believes with M. Robin and Dr. Priestley that the muscular coat of the uterus is not laid bare, but dissents from them in the doctrine of the formation of a new mucous membrane before delivery. He advocates the opinion that "the residuary decidua forms the mucous lining of the uterus" after parturition. Playfair, in his *Science and Practice of Midwifery*, represents that "according to Friedländer the decidua is divisible into two layers, the innermost being formed out of the connective tissue of the mucous membrane; the deeper seated, in contact with the uterine walls, being formed out of flattened or compressed gland ducts." Spiegelberg, on the same authority, "believes that the portion of the decidua that is expelled is the more superficial" of these two layers, "while the deeper or glandular layer remains attached to the walls of the uterus." The preponderance of opinion, therefore, seems to be that after delivery occurring in the latter months of pregnancy or at the termination of utero-gestation there remains behind a delicate layer of tissue which possesses germinal principles for the development of the new membrane. However this may be, the question still remains unsolved whether a uterine mucous membrane can be detected after an early abortion.

(To be concluded.)

RECENT PROGRESS IN THE PATHOLOGY AND TREATMENT OF DISEASES OF THE NERVOUS SYSTEM.

BY JAMES J. PUTNAM, M. D.

Treatment of Epilepsy by trephining the Skull.—Dr. M. G. Echeverria, of New York,⁴ gives an interesting analysis of one hundred and

¹ American Edition, page 93.

² Ibid.

³ Page 280.

⁴ Arch. générales de Med., November and December, 1878.

forty-five cases of epilepsy, due to injury or disease of the skull and its appendages, treated in this manner, including seventy-five not hitherto tabulated. Of these cases, ninety-three (64.13 per cent.) are reported as having been cured; eighteen (12.41 per cent.) benefited; five (3.44 per cent.) unmodified; while twenty-eight (19.30 per cent.) died in consequence of the operation. The statements as to recovery would be of more value could the periods during which the cases were under observation have been more generally given; but it can hardly be doubted that there were many recoveries, and less than twenty per cent. of deaths, a proportion which, in the present days of antiseptic precautions, would probably be lessened. These figures are certainly of interest, especially in connection with the author's statement that he has never met with an instance of spontaneous cure of this class of cases, supposing, of course, that the results of the injury persisted. The osseous lesions present in the successful cases were of the most varied kinds, sometimes nothing more than thickening and condensation of the bone. Some of these cases were operated on as late as ten, fifteen, even twenty, years after the injury. For surgical and other details we must refer to the original.

Dr. H. Agnew¹ reports a further case of trephining for epilepsy with failure of memory, resulting from a gun-shot wound received during the war. The wound of the operation healed rapidly, and at least for the short time that he was under observation the patient remained well. It may be mentioned in this connection that Echeverria also considers the presence of mental symptoms as not necessarily counter-indicating the operation.

Dr. E. C. Seguin, of New York,² gives the results of the careful *topographical study of the skull* with relation to the convolutions of the brain, together with an interesting statement of the *surgical aspects* of the modern doctrine of the *localization of cerebral lesions*.

Differential Diagnosis of Spinal-Cord Affections; Pathology of Lead Palsy.—In the last "report"³ a brief sketch was given of the classification of spinal diseases as generally accepted at that time, and the doubt raised by Friedreich and Lichtheim as to the spinal origin of progressive muscular atrophy was presented. Since then the discussion with regard to this and kindred points has widened, and is of interest as concerning the general question of the differential diagnosis of spinal diseases.

In the "report" for 1876⁴ reference is made to a valuable paper by Dr. Remak, of Berlin, in which the peculiar distribution of the paralyzes among the muscles of the arm in lead palsy is made, through ar-

¹ Philadelphia Medical Times, September, 1878.

² New York Medical Record, 1878.

³ The JOURNAL, vol. xcix., page 241.

⁴ The JOURNAL, vol. xciv., page 354.

guments from analogy, to bear evidence in favor of the spinal origin of that disease. This argument has recently been reinforced in another able and exhaustive article by the same diligent observer.¹ Different types of spinal amyotrophic affections are there shown to exist, characterized by peculiarities in the distribution of the paralyses and atrophies, muscles which have similar *functions* becoming diseased together, though supplied by different nerves. Of these the chief are the "upper-arm type" and the "fore-arm type," the latter including, among others, the usual variety of lead palsy (*supinator longus*, etc., not involved). The actual demonstration of disease of the spinal cord in these cases of lead palsy is, however, but scanty, though Vulpian had found colloid and vitreous degeneration and simple atrophy of some of the cells of the anterior cornua in one case of lead palsy in man, and diffused subacute myelitis in the spinal cord of a dog poisoned with carbonate of lead.

Recently two observations have been reported, by Friedländer² and by Eisenlohr,³ where the spinal cord was found perfectly intact, while the nerve trunks were markedly diseased, and in Friedländer's case the spinal nerve roots contained many very small (newly-formed?) fibrillæ. Remak, in a hasty discussion of Friedländer's paper, which appeared just as his own was going to press, suggests that perhaps spinal changes had been present, but had passed away, as the first step in the recovery of the patient.

This may be true, but the other alternative is also possible, namely, that spinal lesions are not an essential part of the disease; the reason that certain muscles are attacked, while others, supplied by the same nerve, escape, being that the affected muscles are peculiarly susceptible to the poison.

This view, in short, simply transfers the exaggerated susceptibility from special nerve cells of the spinal cord to special muscles.

It would still remain unexplained how a paralysis of myopathic origin could so exactly simulate, in its distribution, paralyses acknowledged to be of spinal origin (especially "infantile paralysis," in cases where the arm is involved), but it is not inconceivable that this should happen; and in fact the distribution of the atrophic changes in progressive muscular atrophy, which is now believed by many to be primarily a muscular disease, is sometimes not unlike that which characterizes lead palsy and infantile paralysis involving the arm. It should be said that the case of Lichtheim, of progressive muscular atrophy without spinal disease, is not considered by all observers as a perfectly typical case of the disease⁴ usually indicated by that name. At all events it is evident

¹ *Archiv für Psychiatrie*, etc., 1879, vol. ix., page 510. Ueb. die Localisation atrophisches-Spinnlähmungen u. spinaler Muskelatrophien, v. Dr. Remak, Privat Docent.

² *Virchow's Archiv*, vol. lxxv., page 24.

³ *Centralblatt für Nervenheilkunde*, etc., 2 Jahrgang, page 100.

⁴ *Virchow's Archiv für Psychiatrie*, etc., vol. ix., page 369.

that more attention must be paid in the future than heretofore to the possibility of primary myopathic origin in many cases of this class, whatever may be the limits to be finally assigned to them.

"*Disseminated Neuritis.*" — Under this name Dr. J. Gros¹ proposes to group together a number of cases which have been variously classified as "acute ascending paralysis" (Landry), "progressive paralysis" (Graves), "atrophie nerveuse progressive" (Jaccoud), "acute progressive neuritis" (Eichhorst), etc.; the pathological bond of union between them being the absence of serious lesions of the spinal cord or its membranes (such as might sometimes fairly be expected from the symptoms), and the presence of disseminated inflammation of the peripheral nerves. It is, of course, not impossible that a partial reclassification of these cases will have to be made at a future day, the "ascending paralysis" of Landry, in particular, deserving perhaps to form a *group* by itself, or to be classed definitely among the spinal diseases; but as at present defined the characteristics of the disseminated neuritis are as follows: —

There are three varieties: (1) the acute, usually fatal in the course of three weeks, often before the muscular atrophy commonly met with has had time (it is inferred) to develop itself; (2) the subacute, ending either in partial recovery or in death in the course of six months to a year, and liable, in the former event, to relapse; (3) the chronic, the most common form, lasting many years, but liable, also, to burst out into the acute variety at any time. The onset of the disease is commonly rapid, and not infrequently marked by a short febrile attack.

The first characteristic symptoms are formication and violent pain, confined to the distribution of certain nerves, usually of the lower extremities, often attended by perversion or loss of the cutaneous sensibility in the same parts. The muscles supplied by the affected nerves become more or less rapidly paralyzed, and atrophy usually supervenes at a later period.

These symptoms may give place to a more generalized paralysis, which progresses upwards from the lower extremities to the arms and trunk, and kills the patient rapidly by asphyxia (ascending paralysis of Landry?), seeming to paralyze in some way the functional activity of the spinal cord; or they may attack one limb, or rather one set of nerves after the other, with more or less reference to symmetry, and remaining liable to be arrested at any point in their progress. The affected nerves become tender, but, at the outset, near their peripheral extremities alone.

The absence of contractures, of exaggerated reflex excitability, of recto-vesical disorders, exclude the various forms of myelitis; but the differential diagnosis between disseminated neuritis and localized spinal

¹ Contribution à l'Histoire des Névrites, Paris, 1879.

meningitis is sometimes difficult, and might be impossible. Furthermore, even if not primarily involved, the spinal membranes, and even the spinal cord, are liable to suffer secondarily, as is well known, in cases of inflammation of nerves, or both parts may be simultaneously but separately attacked.

Dr. Gros admits that it is difficult, at present, to define accurately the boundaries of the disease of which he treats, and with regard to the acute ascending paralysis of Landry the feeling has been especially strong in favor of looking upon it as a spinal affection; but the paper is important, as leading pathologists to pay more attention than they have done to the condition of the peripheral nerves in doubtful cases.

Tetanoid Paraplegia (Spastic Paraplegia). — A few years ago another "systematic" disease of the spinal cord was believed to have been made out through the brilliant generalizations of Erb and of Charcot, designated pathologically as sclerosis of the lateral columns, though, as was admitted from the outset, no sufficient post-mortem proof of the diagnosis had been furnished. The main characteristic symptom was spasmodic rigidity of the muscles of the legs, with exaggerated reflexes, especially the "tendon reflexes," but without marked alteration of sensibility or recto-vesical troubles, the whole making up a group of symptoms not very infrequently met with. Within the past year grave doubts have been thrown on the propriety of referring these symptoms to a systematic, symmetrical lesion of the lateral columns, since it appears that they may be present with various forms of spinal disease. The most important of these criticisms are contained in papers by Professor Leyden, of Berlin,¹ and by Dr. E. C. Seguin, of New York.² The latter had, in 1873, published a description of five cases, under the name of "tetanoid pseudo-paraplegia," which presented essentially the same group of symptoms with those under consideration. His conclusions with regard to the present discussion may be briefly summarized as follows: (1.) The existence of primary, idiopathic sclerosis of the lateral tracts (crossed pyramid tracts, columns of Türck) is possible, but not proved. (2.) The symptom tetanoid rigidity of the lower extremities may be due to myelitis in the dorsal region, myelitis from injury or pressure, disseminated nodular sclerosis, etc. (3.) It is probable that a functional tetanoid paraplegia exists in children, caused by genital or other peripheral irritation; and (4) it may possibly be due to defective cerebral development, and consequent agenesis of certain tracts in the spinal cord. The symptom may be allied to the "late contracture" from cerebral hemiplegia.

Nerve Stretching and Nerve Section. — Almost all the larger superficial nerves of the body have now been stretched for neuralgia or motor

¹ Berl. klin. Wochenschrift, December, 1878.

² Archives of Med., February, 1879.

disorders, with varying but on the whole satisfactory results. Recently, Nussbaum¹ has performed the operation on the abdominal (terminal) branches of the eighth, ninth, and tenth intercostal nerves of both sides, with complete success, so far as known (up to the twenty-fifth day). In the course of the operation the peritonæum was wounded, and there was slight hernia of the omentum.

Clonic spasm of the facial muscles, so intractable to ordinary treatment, has also been cured by stretching the facial nerve,² by Dr. Baum. The author thinks that the crushing which the nerve received may have contributed to the result. The operation was followed by paralysis of the face, which lasted, however, but half an hour.

Interesting surgical details with regard to the *section* of the *supra* and *infra orbital nerves* are given by Lasalle,³ Lossen,⁴ Braun,⁵ Czerny,⁶ and a clinical review of the subject by Dr. S. Weir Mitchell.⁷

The use of aconitia in trigeminal neuralgia had been highly praised by Gubler, and has been recently studied by Dr. E. C. Seguin and others of New York, and found in a small number of severe, intractable cases sometimes remarkably efficacious, sometimes valueless. In the successful cases the good effect persisted for long periods, at least, after a comparatively short use of the drug. The formula used by Dr. Seguin is:—

Duquesnel's aconitia ⁸	gr. 1-12 to 1-8
Alcohol,	
Glycerine	ññ 3i.
Peppermint water	ad f 3 ij. M.

Dose: one teaspoonful three times a day.

The dose is to be carefully but steadily increased, until the full physiological action of the drug is felt (the first symptom is usually a feeling of numbness, especially over the face).

PROCEEDINGS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION.⁹

THE third annual meeting of the American Dermatological Association was held at the Park Avenue Hotel, New York, on the 26th, 27th, and 28th of August, and the sessions were of great interest, as a rule.

There was a fuller attendance than last year, when the society met at Saratoga, there being present Drs. J. N. Hyde, of Chicago, W. A. Hardaway, of

¹ Cit. in Centralblatt für Nervenheilkunde, etc., February 1, 1879. Sonnenburg Ref.

² Berl. klin. Wochenschrift, 1878, No. 40.

³ Cit. in Bull. de Thérapeutique, November 30, 1878.

⁴ Centralblatt für Chirurgie, 1878, No. 5.

⁵ Centralblatt für Chirurgie, 1878, No. 10.

⁶ Cit. in Centralblatt für Nervenheilkunde, etc., 1879, No. 11. Erlenmeyer Ref.

⁷ Brain, October, 1878.

⁸ This preparation appears to be especially efficacious.

Reported for the JOURNAL.

St. Louis, and L. Duncan Bulkley and F. P. Foster, of New York, who were absent then; and the papers read were perhaps generally of a somewhat more practical character than on that occasion.

During the course of the meeting the following officers were elected for the ensuing year: president, Dr. L. A. Duhring, of Philadelphia (reëlected); vice-presidents, Dr. Edward Wigglesworth, of Boston, and Dr. W. A. Hardaway, of St. Louis; secretary, Dr. Arthur Van Harlingen, of Philadelphia; and treasurer, Dr. I. E. Atkinson, of Baltimore (reëlected); and it was decided that the next annual meeting should be held in Newport, and commence on the last Tuesday of August, 1880.

The president's address, by Dr. Duhring, was on *The Rise of American Dermatology*, and it was exhaustive in regard to the subject treated, exhibiting throughout unmistakable evidences of the most painstaking labor and elaborate research. The key-note of the whole was Dr. Benjamins Rush's dictum, "Sciences are not made, but grow," and, accordingly, he traced the development of this branch of medicine in this country from the time that the first medical work (*A Brief Guide in the Small-Pox and Measles*, by Thomas Thatcher, 1677) ever published here appeared, step by step, until we reach the present period of such satisfactory progress. While all through the generations preceding, however, the foundations of the superstructure that now appears so admirable were being laid, he showed that the work accomplished was as a general rule of a very crude and desultory character, and that it was not until very recently that American dermatology, in the broad sense in which this term is to-day employed, had its birth; dating back, as it does, scarcely farther than a period within the recollection of all the members of the association.

The first paper after the president's address was one on *A Case of Incomplete Vitiligo*, by Dr. I. E. Atkinson, of Baltimore. The disease occurred in a female, a dark mulatto, and commenced on the backs of the hands, from thence spreading over the arms, neck, anterior portion of the trunk, buttocks, and lower extremities; and the curious part of it was that, contrary to the generally accepted opinion that in vitiligo a restitution of the normal pigmentation does not take place, the writer was able to observe in portions of the surface, where error could be readily avoided (as the backs of the hands), first the complete absence of deficient coloration, subsequently the existence of the vitiligo, and, finally, its complete recession from the parts.

Dr. J. C. White, of Boston, thought it a matter of importance that this restoration of pigment should have been under the observation of so reliable an authority, and said that he believed it to be the first instance of the kind in which this was the case.

Dr. Hardaway mentioned that Dr. Yandell has reported a large number of cases of vitiligo in the negro, some of which would seem to show that in the African race this is not always a permanent affection.

Dr. George H. Fox, of New York, was of the opinion that in the *complete* forms of vitiligo no return of pigmentation could ever take place.

The discussion was also participated in by Drs. L. Duncan Bulkley and R. W. Taylor, of New York, and Dr. S. Sherwell, of Brooklyn. At its conclusion, a paper entitled *A Contribution to the Study of the Bulbous Eruption induced by the Ingestion of Iodide of Potassium* was read by Dr. J. N.

Hyde, of Chicago. The case which formed the basis of the remarks made was that of an infant at the breast, eight months old, the subject of chronic eczema capitis. When seven months of age a profuse crop of boils came out upon the head, and with the hope of checking the further development of these the attending physician administered iodide of potassium in quantities of one drachm *per diem*. In consequence of the use of the iodide well-marked hydra appeared over the extremities and nates, which, as is always the case in this affection, promptly receded after the exhibition of the drug was discontinued. In the course of the paper Dr. Hyde presented a table of all the cases that were on record, so far as he knew, which showed that the eruption was known to have occurred in only twelve individuals, of whom his own patient was by far the youngest. The most valuable of the practical conclusions arrived at was that, both in eczema and in acquired syphilis, when a distinctly vesicular or bulbous eruption becomes suddenly apparent, the lesions intermingled with those characteristic of the diseases named, in the person of patients who have been under the charge of inexperienced practitioners, the possibility that the iodide of potassium has been previously administered should be carefully estimated.

During the discussion which followed this paper, Dr. Edward Wigglesworth, of Boston, related a case in which an eruption of the above character appeared on the lower extremities in a lady who at the time was taking the bromide of potassium in large doses, by the advice of Dr. Brown-Séquard, for epilepsy. The bullæ were somewhat acuminate, and varied in size from that of a pea to that of the end of the finger. Afterwards they became confluent, and extended up to the middle of the thigh on one side, while they were confined to the region below the knee on the other. The affection remained entirely intractable as long as the bromide was kept up; but as soon as this was discontinued it began to improve, and before long disappeared.

Drs. Van Harlingen, White, and Duhring all spoke of the service of arsenic in preventing or relieving the cutaneous trouble sometimes set up by the iodide and bromide of potassium; and Dr. Taylor stated that while it had proved efficacious in connection with the iodide, this was not the case as regards the bromide, in his hands.

At the opening of the afternoon session, Dr. Bulkley read a paper entitled Two Cases of Chancre of the Lip, probably acquired through Cigars. Both the patients in which the disease occurred were physicians of education and experience, and after a very careful search for the means by which the syphilis was communicated each could arrive only at the conclusion that this had occurred through the agency of cigars. Dr. Bulkley referred to the case of the young woman in Connecticut, several years ago, who, it was found, was in the habit of putting their ends in her mouth while engaged in making cigars, and stated that he believed that these two were the first cases on record in which syphilis was transmitted in this way.

An interesting discussion in regard to various points touched upon by Dr. Bulkley followed the reading of the paper, and it was participated in by Drs. Heitzmann, Atkinson, Taylor, Hyde, Bulkley, and Wigglesworth. The latter mentioned a very interesting extra-genital case, the initial lesion of the syphilis being on the tonsils. In this case also the patient was a physician.

The next paper was by Dr. Fox, on *The Treatment of Eczema and Ulcers of the Leg by an Elastic Tubular Bandage*. The manner of applying it was to slip it over the foot on the leg as far as necessary, after having first anointed the limb with oil. Among the advantages claimed for it were its lightness and inexpensiveness, and the equableness of the pressure exerted by it.

Dr. C. Heitzmann, of New York, the distinguished pathologist, followed with an extemporaneous, but finished and elaborate, exposition of his *Microscopical Studies on Inflammation of the Skin*, which he illustrated with numerous pencil drawings, executed while he was talking, and during the course of which he made the statement that the inflammatory process is perfectly plain to-day in its minutest features, so far as our best modern microscopes allow of a definite conclusion, and that the present results of the researches made are in full accordance with the facts of clinical observation, — an accordance which was impossible in connection with all the doctrines that have heretofore been advanced. His observations on inflamed portions of skin have led him to the following conclusions:—

(1.) In epithelium the first step of the inflammatory process consists in an increase of the living matter, both in the protoplasmic bodies and between them; the former producing the coarse granulation of the epithelia, and the latter the thickening of the so-called "thorns" in the cement substance. Any particle of living matter, either in the epithelia or between them, through continuous growth may lead to a new formation of epithelial elements, with the termination in hyperplasia of epithelium (psoriasis, squamous eczema, horny formations, etc.).

(2.) In connective tissue the first manifestation of the inflammatory process is the dissolution of the basis substance and reappearance of the protoplasmic condition; by which process and the new formation of medullary elements (which may start from any particle of living matter) the inflammatory infiltration is established. The sum total of the inflammatory elements which remain united with each other by means of delicate offshoots represents an embryonal or medullary tissue. If the new formation of medullary elements be scanty, the resolution is accomplished by re-formation of basis substance (erythema, erysipelas, etc.). If, on the contrary, the new formation of medullary elements be profuse, a new formation of connective tissue (hyperplasia) will result (scleroderma, elephantiasis, etc.).

(3.) The plastic (formative) inflammation may be accompanied by the accumulation of a large amount of a serous or albuminous exudation in the epithelial layer (miliaria, sudamina, herpes), or in the connective tissue of the derma (urticaria). In both instances complete resolution will ensue.

(4.) Suppuration in the epithelial layer of the rete mucosum is produced by an accumulation of an albuminous or fibrinous exudation, by which a number of epithelia are destroyed, and by new formation of pus corpuscles from the living matter of the epithelial elements themselves. Epithelial suppuration heals without the formation of a cicatrix (eczema madidans and pustulosum, impetigo, pemphigus, variola).

(5.) Suppuration in the connective tissue of the derma results from the breaking apart of the newly formed medullary elements, which, being suspended in

an albuminous or fibrinous exudation, now represent pus corpuscles. Pus is a product of the inflamed connective tissue itself, and always a result of destruction of this tissue. Suppuration of the derma invariably heals through cicatrization (abscess, furuncle, acne, ecthyma, variola).

The morning session of the second day, August 27th, was inaugurated with a paper on *Viola Tricolor* (wild pansy), by Dr. H. G. Piffard, of New York. In regard to its active ingredients he stated that little was known. Boullay failed to find violine in it. (Gubler.) As to its physiological action, a strong infusion made from half an ounce to one ounce of the herb, without the root, does not give rise to any suspicion that it contains violine or emetine. Its action, which is exceedingly mild, however, sometimes proves laxative, and at others diuretic. It has long been a favorite in France in the treatment of *eczema capitis*, and Dr. Piffard has employed it for many years with great satisfaction in chronic cases of this affection. The watery preparations have appeared to answer better than the alcoholic, and his usual procedure is to give it in infusion, combined with purgative doses of senna at first. The imported herb should always be employed, and care should be taken to procure a good quality, as most of it in the market is inferior. A discussion of some length followed, which ran into the wider subject of the relative value of internal and local treatment in *eczema*.

Dr. Van Harlingen then read a paper entitled *A Case of hitherto Undescribed Tuberculo-Vesicular Disease of the Skin*. The age of the patient, who was a female and a native of Germany, was thirty-nine years, and the skin affection had lasted since early life. It was principally confined to the legs and ankles, while the upper portions of the body were the seat of chronic *eczema*. The lesions were distinct and solitary, and consisted of large tubercles, oval in shape and often of the size of the thumb-nail, slightly elevated, and frequently containing a small amount of pus in the centre, which was depressed. Fifty of these were counted on the left leg, and thirty on the right. The patient was under observation for about three months altogether, during a portion of which time she was treated with iodide of potassium and bichloride of mercury without benefit. For the last month Dr. Bulkley's liquor picis alkalini was employed locally with some amelioration of the symptoms. Specimens from the tubercles were sent to Dr. Heitzmann for microscopical examination, who reported that the main pathological change was in the capillaries of the papillæ, which were frequently found converted into connective tissue.

In his remarks upon the case at the meeting, Dr. Heitzmann expressed the opinion that it was merely one of *eczema*, which had been so aggravated by constant scratching that it had been converted into chronic urticaria or erythema; but Dr. Van Harlingen stated that if he had seen the patient he did not believe that he would make such an assertion, while the pathological history of the lesions was entirely at variance with such a hypothesis.

Dr. Duhring, who had also seen the case personally, confirmed Dr. Van Harlingen's statements, and remarked that when he first looked at it he recognized at a glance that there was an affection present which he had never met with before in all his experience.

(To be concluded.)

THE FORTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

On Tuesday, August 5th, the British Medical Association met at Cork, Ireland, Dr. Falconer, the president, in the chair.

Dr. Falconer opened the meeting with the delivery of his retiring address, in which he reviewed the work of the association for the past year, augured an increase of the association from the character of the present meeting, and commended his successor, Dr. O'Connor, to the notice of members.

Dr. T. D. Sullivan, president of Queen's College, Cork, then announced that the Queen's University, as a mark of their appreciation of the work of the association, will confer the degree of M. D. upon the outgoing and incoming presidents.

A vote of thanks to Dr. Falconer was then proposed and conferred, a sketch of Dr. Falconer's medical life being given by Dr. Waters.

The names of eminent foreigners present were then read, and included those of Hirschberg, Martin, and Lieb, of Berlin; Loring, Agnew, Seguin, Beard, Sayre, and Sayre, Jr., of New York; Palmer, of Michigan; L. Turnbull, of Philadelphia; Byford, of Chicago; Yandell, of Louisville; Cordes, of Geneva; Gracinto, of Turin; Ball, De Mussy, Gallard, Lutand, Boggs, Bonafoat, Charcot, of Paris.

The report of the council was next read. Receipts for past year, £12,433 4s. 7d.; payments, £12,939 9s. 9d. The balance against the treasury was more than counterbalanced by the revenue account, which shows the amount of £769 16s. 10d. in favor of the association. Total excess of assets over liabilities, £6219 8s. 6d. Number of members admitted during the year, 680; 87 deaths, 172 resignations. Total number of members on register, 7810. The increased size and prosperity of the *Journal* of the association received mention. In consideration of extraordinary professional services by Surgeon-Major James Henry Raynolds in Zululand, of his attention to wounded under fire, etc., the gold medal of the British Medical Association "for distinguished merit" was awarded him. The work of the Habitual Drunkard's Committee has been successful. Dr. Cameron's bill has become law, and the principle of the detention of the habitual drunkard has been affirmed by both houses of Parliament. Reference was made to certain parliamentary bills, and to the report of the Medical Reform Committee. The report terminated by allusion to eminent members who have died during the past year, and whose deaths have from time to time been noticed in our pages.

The second general meeting was opened on the following day by the new president, Dr. O'Connor. It was announced that the next annual meeting would be holden in Cambridge, and Professor Humphry was appointed president elect.

The address on Medicine, an eloquent effort, published in the *British Medical Journal* for August 9th, was then delivered by Dr. Hudson, who subsequently received flattering thanks from the association.

Dr. Gallard, of Paris, through Dr. Bennett, presented his works to the association. Dr. Carpenter suggested, since the association as a traveling body

had no library, that these volumes be given to the library of Queen's College as a memento of the occasion. Adopted.

A letter of regret at his absence, from Donders, of Utrecht, was read.

The third general meeting on the next day listened to the interesting report of the Medical Reform Committee. It will be found in the *British Medical Journal* for August 16th. Likewise the report of the Committee on Habitual Drunkards, also read at this meeting.

The address in Surgery, by Mr. Savory, then followed.

The presentation of the gold medal to Surgeon-Major Raynolds was then made, with felicitous remarks.

At the fourth general meeting, August 8th, Dr. Andrew Fergus's address on Public Medicine was read by Dr. McCall Anderson, Dr. Fergus having been detained by illness in his family.

The usual vote of thanks followed.

The concluding general meeting, holden August 9th, heard the report of the Hospital Out-Patient Reform Committee, and the committee was reappointed. The report deserves attention, for it dealt with a serious evil, namely, the injurious effect of the out-patient system of hospitals upon the general public. The system was described as one which had made the hospitals great public dispensaries for classes not the proper subjects of hospital relief. See the *British Medical Journal* of August 16th for the report.

Dr. Hart then moved that a committee be appointed to consider and report whether it would be desirable to adopt the metric system in Great Britain and Ireland, and whether (and if so, by what means) the association should facilitate its introduction. The motion was seconded. Dr. Seguin, of New York, then laid before the meeting "a history of what he termed the brilliant metric campaign in America." His essay will be found in the *British Medical Journal* for August 16th. At its conclusion the motion was carried, and a strong committee, consisting of such men as Lauder Brunton, Clifford Allbutt, A. Carpenter, Quain, etc., was appointed.

The reports of the committees on registration of disease and on parliamentary bills were read.

Motion was made that a committee be appointed to see how convalescents from acute infectious diseases may be dealt with, by isolation or otherwise, in order to prevent the spread of the disease. The remainder of the meeting was devoted to votes of thanks. Addresses which have not been mentioned in this synopsis will be found in the *British Medical Journal* for August 9th and 16th. They are all worthy of perusal. The meeting was one of the largest ever held away from the great centres. The principal scientific events were the address of Dr. Savory and the interesting and novel demonstrations of the hitherto unseen blood corpuscles, by Dr. Norris, who believes the body to be the fibrin factor of the blood. The section work was excellent.

It is to be regretted that we have no annual national medical meeting in the United States similar in character, and influenced by such scientific devotion as that of the British Medical Association.

GREAT BRITAIN AND THE UNITED STATES.

By the British journals which we now so frequently see in the hands of our practitioners; by the works on medical subjects by British authors which are constantly being welcomed by us, and added to those standard treatises which have long had a recognized place upon our shelves; by the warm reception on the other side of the water of many of the writings of our American authors, one is always more or less impressed with the community of medical and scientific interests and developments between the two countries using the same language, and having, in some respects if not in all, similar habits of life and of constitution. And this is brought home to us with more than usual force at the present time, just as the accounts of the late meeting of the British Medical Association at Cork are reaching us, an abstract of which we lay before our readers. At this meeting a number of well-known Americans were present, several of whom had been asked to prepare papers for the occasion.

Of the addresses in the different sections, it may be safely said that all were interesting, and one or two very suggestive, notably that of Mr. Savory in Surgery, and of Dr. Andrew Clark in Medicine. Antiseptic surgery and the best methods of improving medical education are subjects in which as deep an interest is taken here as in Great Britain, and we are as eager for light upon them as our brethren there can be.

The same thought again occurs to us in following the testimony before the select committee of the House of Commons in regard to the composition and efficiency of the British Medical Council. Their achievements may be ours; their obstacles and difficulties, with some changes of circumstances and surroundings, are pretty sure to be ours. Good work cannot be done there, and we not profit by it; the British standard of medical education, of professional attainment and accomplishments, cannot be elevated, and we not be drawn up by it; nor can they make mistakes or encounter and overcome difficulties, and we not learn by them if we will. Of all this the converse is also true. In the scientific and practical branches of our profession there is already mutual respect and confidence and coöperation between the two countries; perhaps it is not too much to hope that the time may come, and that not at a too distant day, when this coöperation may be extended advantageously, if only in a limited way, to the mutual minimum educational standards and guarantees.

The British Medical Council have been considering the propriety of adding to their register a department for the registration of foreign practitioners under certain restrictions, giving a guarantee that the diploma represents at least the minimum attainments required from the British diploma. With the constantly increasing social and commercial intercourse between the two countries, such a step would affect the United States more perhaps than any other country. The difficulty naturally would be to devise a test for the value of the American degree. At present the unregistered practitioner in Great Britain cannot collect fees in the courts, nor sign certificates, nor hold medical appointments in public institutions or in the merchant service, nor can he appear as a medical witness (the latter restriction would probably be regarded by many as a boon); otherwise we believe the unregistered practitioner, whether native or foreign, stands upon the same footing as the registered, and in the

matter of collecting fees upon the same footing as the member of the College of Physicians. In the recommendations of the General Medical Council on education and examination for 1879, a copy of which is before us, we notice Chapter III., Article 19, "That the age of twenty-one be the earliest age at which a candidate shall obtain a license to practice, and that the age shall, in all instances, be duly certified."

Article 20. "That no license be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the candidate as a medical student."

Chapter IV., Article 5. "That the course of professional study required for a license shall occupy at least four years, of which at least three winter and two summer sessions shall be passed at any school recognized by any of the licensing bodies mentioned in Schedule A of the medical act."

This subject is one which may at an early day have practical importance for our readers, and we hope to be able to offer them further information.

MEDICAL NOTES.

—Says the *St. Louis Courier of Medicine*: "It is asserted that strong coffee, without sugar or milk, given in teaspoonful doses every ten minutes, will arrest the vomiting of cholera infantum, and that a tablespoonful given as frequently to adults will relieve the vomiting of cholera morbus."

—M. Hayem has been elected to the chair of therapeutics in Paris, made vacant by the death of Professor Gubler. — Mr. Clement Williams, of England, formerly a surgeon in the royal army, and latterly Florence correspondent of the *JOURNAL*, died of typhoid fever in Florence in June last. He was an able man, and will be regretted by many. — Professors Charcot and Ranvier, of Paris, Professor Esmarch, of Kiel, and Schiff, of Geneva, have been elected corresponding members of the Royal Academy of Brussels.

—Dr. Preissmann, in the *Wien. Med. Presse*, 1879, No. 16, strongly recommends the use of salicylic acid in the treatment of psoriasis. A little cotton-wool or lint is soaked in a mixture of one part of salicylic acid and sixteen parts of rectified spirit, and the affected parts of the skin are rubbed with it. The crust soon falls off, leaving the surface of the skin red, shiny, and smooth.

—Dr. Quinant, in the *Union médicale*, recommends *massage* of the hypertrophied tonsils in non-inflammatory cases. He passes the index finger, covered with powdered alum, back to the tonsils, and compresses and "kneads" them. This done, the patient gargles with a mild astringent, and at the end of two or three days is able to perform the operation for himself. He asserts that by this means he is able to resolve the hypertrophy and avoid excision of the glands. This treatment could hardly be recommended in children. Much trouble of this kind could be avoided by a careful inspection of the throat after coughs in young children. The local catarrh which gives origin to the enlargement can be attractively treated by sweetened medicated spray.

PHILADELPHIA.

—The medical department of the University of Pennsylvania and the Jefferson Medical College both open for the preliminary course of lectures on

Monday, September 8th, the regular winter course commencing on the 1st of October. The clinical lectures at the hospitals also begin early in September. During the summer months medical matters have been almost at a stand-still. Since the lectures closed in June it is true that the dissecting-rooms have been kept open, but students only exceptionally avail themselves of them, as few have the fortitude to remain in the city during the hot weather. Those who continue at their studies, however, have opportunities at the dispensaries and in the hospitals that they are debarred from in the winter, but can enjoy freely during the summer, more particularly since the establishment of the daily clinical service at the colleges. This is in marked contrast with the time, not so very long ago, when the colleges were open for five months in the year, and during the remainder of the time were completely closed; and the retrospect should afford some encouragement to those who have been laboring for advance in medical education and in the requirements for graduation.

— Professor Roberts Bartholow has regularly taken up his abode in Philadelphia, and has been warmly received by the local profession and the faculty of Jefferson College.

— Dr. Wm. H. Greene, recently a student of Professor Wurtz in Paris, and translator of Wurtz's Elements of Chemistry, has been appointed demonstrator of practical chemistry at the University of Pennsylvania, to assist Professor Wormley.

— The operation of rapid lithotripsy and evacuation by Bigelow's method was performed by Dr. Thomas G. Morton at the Pennsylvania Hospital on the 22d of August. This is believed to be the first performance of this operation in the city. The subject was a young man of eighteen years, and the calculus of uric acid, weighing about a drachm.

— A death from tetanus, apparently the result of a bee sting, occurred here not long since. John B., thirty-four years of age, was brought to Pennsylvania Hospital with the complaint that he could not move his jaw when he tried to eat his dinner on the day of admission, and that on his way to the institution he had had several convulsions in the street. Upon examination, a small spot covered by dried pus and surrounded by a small area of inflammation was found on his fore-arm, where, he said, he had received a sting from a bee a couple of weeks before. After admission he had well-marked tetanic convulsions, particularly affecting the respiratory muscles. He died of exhaustion within a few hours after reaching the hospital. At the post-mortem no other cause for death was detected, and as the coroner's physician pronounced it a case of tetanus from a bee sting, a verdict was rendered accordingly.

— Owing to the vigilance of our board of health and the medical officers in charge of the Lazaretto (the quarantine station), the yellow fever did not succeed in coming nearer than within twelve miles of the city, where a comparatively large number of fever-infected vessels were detained at quarantine and disinfected. In reply to a communication from the National Board of Health, in regard to hotel runners and other persons from the city boarding vessels in the Delaware River below the quarantine station, the Philadelphia board has passed resolutions referring the matter to the consideration and control of the national health organization, and declaring the question within the jurisdiction of the latter body.

LIST OF CHANGES IN THE MEDICAL CORPS IN THE NAVY FROM
AUGUST 20, 1879, TO DATE.

August 20th. Medical Inspector P. S. Wales appointed surgeon-general U. S. N. and chief of bureau of medicine and surgery, navy department, vice Surgeon-General J. W. Taylor, retired.

August 21st. Surgeon Adrian Hudson appointed assistant to the bureau of medicine and surgery, vice Surgeon J. B. Parker, detached and placed on special duty temporarily.

August 22d. Surgeon A. A. Hochling ordered to special duty at Washington, D. C., attending officers of the navy and marine corps, vice Medical Inspector P. S. Wales, detached.

August 26th. Passed Assistant Surgeon J. R. Waggener detached from the Passaic and ordered to the nautical school ship St. Mary's, vice Passed Assistant Surgeon B. F. Rogers, detached and ordered to the Michigan.

August 26th. Passed Assistant Surgeon H. P. Harvey ordered to the U. S. receiving ship Passaic, Washington, D. C.

August 27th. Assistant Surgeon Daniel M. Guiteras ordered to the Powhatan, vice Assistant Surgeon Rich Ashbridge, detached and granted three months' leave.

August 28th. Passed Assistant Surgeon H. Aulick detached from the naval hospital, Mare Island, Cal., and ordered to the Tuscarora, vice Assistant Surgeon M. H. Crawford, detached and ordered to the receiving ship at Mare Island, Cal.

August 29th. Medical Inspector William M. King ordered to the U. S. S. Shenandoah, and as fleet surgeon of the South Atlantic Station.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM AUGUST 23, 1879, TO AUGUST 29, 1879.

HEAD, JNO. F., lieutenant-colonel and surgeon. Relieved from duty in Department of the East, and assigned to duty as attending surgeon and examiner of recruits at Boston, Mass. S. O. 195, A. G. O., August 25, 1879.

PERIN, GLOVER, lieutenant-colonel and surgeon, medical director of the department. Granted leave of absence for one month on surgeon's certificate of disability. S. O. 160, Department of the Missouri, August 20, 1879.

CLEMENTS, B. A., major and surgeon. Relieved from duty in Department of the Platte, and to report in person to the surgeon-general of the army. S. O. 195, C. S., A. G. O.

HORTON, S. M., major and surgeon. Relieved from duty in Department of the East, and to report in person to the commanding general, Department of the Platte, for assignment to duty. S. O. 195, C. S., A. G. O.

BREWER, J. W., captain and assistant surgeon. Relieved from duty in Department of the Platte, to proceed to New York city, and, on arrival there, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

TREMAINE, W. S., captain and assistant surgeon. Relieved from duty in Department of the Missouri, to proceed to New York city, and, on arrival, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

VICKERY, R. S., captain and assistant surgeon. Relieved from duty in Department of the East, and to report in person to commanding general, Department of the Platte, for assignment to duty. S. O. 195, C. S., A. G. O.

KIMBALL, J. P., captain and assistant surgeon. Relieved from duty in Department of the East, and to report in person to the commanding general, Department of the Platte, for assignment to duty. S. O. 195, C. S., A. G. O.

HOFF, J. V. R., first lieutenant and assistant surgeon. Relieved from duty in Department of the Platte, to proceed to New York city, and, on arrival, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

ADAIR, GEORGE W., first lieutenant and assistant surgeon. Upon expiration of his present leave of absence to report in person to commanding general, Department of the East, for assignment to duty. S. O. 195, C. S., A. G. O.

BROWN, P. R., first lieutenant and assistant surgeon. Relieved from duty in Department of Dakota, to proceed to New York city, and, on arrival there, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

FINLEY, J. A., first lieutenant and assistant surgeon. Relieved from duty in Department of the Missouri, to proceed to Philadelphia, Pa., and, on arrival there, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

TAYLOR, B. D., first lieutenant and assistant surgeon. Relieved from duty in Department of Dakota, to proceed to New York city, and, on arrival there, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

TURRILL, H. S., first lieutenant and assistant surgeon. Upon expiration of his present leave of absence to report in person to commanding general, Department of the East, for assignment to duty. S. O. 195, C. S., A. G. O.

KILBOURNE, H. S., first lieutenant and assistant surgeon. Relieved from duty in Department of the Missouri, to proceed to New York city, and, on arrival there, report by letter to the surgeon-general. S. O. 195, C. S., A. G. O.

REPORTED MORTALITY FOR THE WEEK ENDING AUGUST 16, 1879.

Cities.	Population estimated for July, 1879.	Reported Deaths in each.	Annual Death-Rate per 1000 during the Week.	Percentage of total Deaths from					
				The Principal Zymotic Diseases.	Diarrhoeal Diseases.	Diphtheria and Croup.	Pneumonia.	Scarlet Fever.	
New York.....	1,085,000	483	23.21	36.85	25.26	2.69	3.73	1.86	
Philadelphia.....	901,380	294	17.07	24.83	17.68	1.70	1.70	.68	
Brooklyn.....	564,400	246	22.73	39.84	32.52	4.47	2.85	1.22	
Chicago.....	—	253	—	41.90	20.95	9.48	1.18	4.35	
St. Louis.....	—	118	—	29.66	16.10	.85	1.70	.85	
Baltimore.....	395,000	154	22.00	32.47	17.53	2.60	1.95	3.90	
Boston.....	350,000	145	21.00	40.69	33.10	3.45	.69	—	
Cincinnati.....	280,000	94	17.51	34.04	11.70	10.64	5.32	8.51	
New Orleans.....	210,000	87	—	8.05	3.45	1.15	1.15	—	
District of Columbia.....	160,000	101	32.86	34.65	15.84	.99	3.96	2.97	
Cleveland.....	—	51	—	37.25	19.61	7.84	5.88	—	
Pittsburgh.....	—	75	—	40.00	17.33	14.67	4.00	2.67	
Buffalo.....	—	—	—	—	—	—	—	—	
Milwaukee.....	—	44	—	43.18	29.55	11.36	—	—	
Providence.....	101,500	35	17.98	31.43	11.43	11.43	—	5.76	
New Haven.....	60,000	14	12.17	21.43	—	—	—	—	
Charleston.....	57,000	22	20.13	9.09	9.09	—	—	—	
Nashville.....	27,000	20	38.62	25.00	15.00	—	—	—	
Lowell.....	53,300	19	18.68	26.32	26.32	—	5.26	—	
Worcester.....	52,500	23	22.84	26.09	26.09	—	—	—	
Cambridge.....	60,000	24	25.63	20.83	12.50	—	—	—	
Fall River.....	48,500	24	25.80	45.83	25.00	4.17	—	12.50	
Lawrence.....	38,200	19	25.94	31.58	10.53	10.53	—	—	
Lynn.....	34,000	15	23.01	20.00	13.33	6.67	6.67	—	
Springfield.....	31,500	12	19.86	16.67	8.33	8.33	—	—	
New Bedford.....	27,000	25	43.28	36.00	24.00	—	4.00	8.00	
Salem.....	26,400	14	27.65	28.57	28.57	—	—	—	
Somerville.....	23,350	7	15.63	57.14	28.57	28.57	—	—	
Chelsea.....	20,800	8	20.06	75.00	25.00	12.50	—	—	
Taunton.....	20,200	5	12.91	20.00	20.00	—	—	—	
Holyoke.....	18,200	13	37.25	38.46	23.08	—	—	—	
Gloucester.....	17,100	7	21.34	28.57	28.57	—	—	—	
Newton.....	17,100	—	—	—	—	—	—	—	
Haverhill.....	15,300	10	34.08	60.00	40.00	10.00	10.00	—	
Newburyport.....	13,500	8	30.90	25.00	12.50	—	25.00	—	
Pittsfield.....	12,650	13	53.69	15.38	15.38	—	—	—	
Fitchburg.....	12,500	5	20.86	—	—	—	—	—	
Milford.....	9,800	3	15.96	—	—	—	—	—	

Two thousand four hundred and ninety deaths were reported, showing a decrease of 66 from the previous week: 741 from the principal infectious diseases, 528 from diarrhoeal diseases, 304 from consumption, 108 from diphtheria and croup, 61 from pneumonia, 52 from scarlet fever, 51 from typhoid fever, 32 from malarial fevers, 30 from whooping-cough, 30 from bronchitis, 22 from cerebro-spinal meningitis, 14 from measles, two from erysipelas, and

one from small-pox (New York). From *typhoid fever*, Philadelphia and Chicago reported 10 deaths, New York and District of Columbia six, Baltimore four, St. Louis, Boston, Cleveland, and Lawrence two, Cincinnati, Providence, New Haven, Cambridge, New Bedford, Chelsea, and Newburyport one. From *malarial fevers*, St. Louis ten, New York eight, District of Columbia six, New Orleans and Baltimore two, Chicago, Pittsburgh, New Haven, and Nashville one. From *whooping-cough*, New York and Baltimore five, Boston four, Cleveland three, Philadelphia, Brooklyn, Chicago, Cincinnati, and District of Columbia two, Pittsburgh, Cambridge, and Chelsea one. From *cerebro-spinal meningitis*, New York seven, Chicago, Baltimore, and Holyoke two, Philadelphia, St. Louis, District of Columbia, Milwaukee, New Haven, Nashville, Fall River, Chelsea, and Haverhill one. From *measles*, New York six, Chicago three, Brooklyn and Pittsburgh two, St. Louis one. From *erysipelas*, New York and Philadelphia one. From *trismus nascentium*, three in Charleston, two in District of Columbia, and one in Baltimore. Yellow fever continued to increase in Memphis. The infectious diseases continued to decline, especially diarrhoea, consumption and pulmonary diseases remaining about the same. There was a very great increase in diphtheria and croup, and a greater decrease in erysipelas. Whooping-cough was much less fatal; cerebro-spinal meningitis more so. In twenty cities and towns of Massachusetts, with an estimated population of 884,800, diarrhoeal diseases were diminishing in fatality.

The meteorological record for the week in Boston was as follows:—

Date.	Barometer.	Thermometer.		Relative Humidity.				Direction of Wind.			Velocity of Wind.			State of Weather. ¹			Rainfall.	
	Mean.	Mean.	Minimum.	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	Duration.	Amount in inches.
Aug. 17	30.012	55	58	54	93	94	100	96	NE	NE	NE	10	7	4	O	O	R	—
" 18	29.840	59	62	55	100	97	100	99	NE	NE	NE	10	8	23	G	O	R	.64
" 19	29.912	66	75	56	78	55	73	69	W	NW	NW	24	20	10	F	F	C	8.33
" 20	30.110	68	79	53	84	33	72	63	W	NW	SW	6	6	4	C	C	C	1.80
" 21	30.023	73	85	60	79	44	71	65	SW	SW	W	4	8	12	C	F	F	—
" 22	29.796	75	89	66	92	58	83	79	SW	SW	S	10	11	9	R	C	F	—
" 23	29.633	75	86	70	85	51	63	66	SW	W	W	6	12	10	F	F	C	—
Week.	29.908	67	89	53			76		SW			1830 miles.					36.59	5.87

¹ O., cloudy; C., clear; F., fair; G., fog; H., hazy; S., smoky; R., rain; T., threatening.

The mortality from yellow fever in Memphis continues to increase. One hundred and seventy-one cases and 60 deaths were reported for the week ending August 30th, or 848 cases and 228 deaths in all, including those which were not promptly reported from week to week. In New Orleans there have been 17 cases and five deaths reported since the appearance of the disease, July 23d.

For the week ending August 2d, in 149 German cities and towns, with an estimated population of 7,557,465, the death-rate was 25.8 (previous week 24.1). Three thousand seven hundred and forty-nine deaths were reported: diarrhoeal diseases 606, consumption 475, acute diseases of the respiratory organs 282, diphtheria 68, scarlet fever 57, whooping-cough 50, typhoid fever 48, measles 43, puerperal fever 27, typhus fever two, small-pox one. The death-rates ranged from 9.1 in Potsdam to 34.9 in Chemnitz; Munich 33.7; Dresden 28.5; Berlin 30.5; Hamburg 24.7; Hanover 16.9; Cologne 25.6. In the same week, Vienna 24.3; Paris 22.3; Brussels, 21.0.

For the week ending August 9th, in 20 English cities, with an estimated population of 7,383,999, the death-rate was 17.4 against 18.3 of the previous week. Two thousand four hundred and sixty-one deaths were reported: diarrhoea 141, lung diseases 139, scarlet fever 95, measles 82, whooping-cough 66, fever 26, diphtheria 12, small-pox five. The death-rates ranged from 10.3 in Portsmouth to 26.9 in Sunderland; London 17.4; Bristol 14.4; Birmingham 16.0; Liverpool 19.6. For the same week, Edinburgh 15, Glasgow 16, Dublin 24, Geneva 23.2, Zurich 19.2.

AMERICAN GYNÆCOLOGICAL SOCIETY.—The following titles of papers to be read at the fourth annual meeting of the society, to be held in Baltimore, Md., in the hall of the Johns Hopkins University, on Harvard Street, on September 17, 18, 19, 1879, have been received:—

(1.) Annual Address, — The Gynæcology of the Future and its Relations to Surgery. By the president, Dr. T. G. Thomas. (2.) The Justo-Minor Pelvis, with the report of a case. By Dr. W. T. Lusk. (3.) Clinical Notes on the Hypertrophic Elongation of the Cervix Uteri. By Dr. W. Goodell. (4.) The Principles and Practice of Gynæcology as related to Insanity in Women. By Dr. A. J. C. Skene. (5.) Complete Congenital and Accidental Absence or Atresia of the Vagina in the Pregnant and Unpregnant Female. By Dr. I. E. Taylor. (6.) Idiopathic Septicæmia in Gynæcological Practice. By Dr. J. R. Chadwick. (7.) The Treatment of Puerperal Septicæmia by Intra-Uterine Injections. By Dr. E. W. Jenks. (8.) Intra-Uterine Medication. By Dr. J. P. White. (9.) Intra-Pelvic Dislocation of the Ovaries. By Dr. P. F. Mundé. (10.) Report of a Case of Extra-Uterine Pregnancy. By Dr. J. C. Reeve. (11.) The Early Application of the Forceps in the First Stage of Natural Labor. By Dr. I. E. Taylor. (12.) Intra-Uterine Medication by Iodized Phenol. By Dr. R. Battley. (13.) A New Method of Performing Decapitation. By Dr. W. L. Richardson. (14.) Mismanaged Labor the Source of much Gynæcological Practice. By J. Tabor Johnson. (15.) The Relations of Symptoms to Versions and Flexions of the Uterus. By Dr. E. Vander Warker.

AMERICAN ACADEMY OF MEDICINE.—The fourth annual meeting will be held in the rooms of the New York Academy of Medicine, 12 West Thirty-First Street, New York, commencing Tuesday, September 16th, at three o'clock, P. M. The following programme has been determined upon:—

Tuesday afternoon: Organization, election of members, unfinished business, general business. Tuesday evening, at eight o'clock: Address by the president, Lewis H. Steiner, A. M., M. D., of Frederick, Maryland, on The Preparatory Education most needed by the Medical Student. Wednesday, ten A. M.: General business. Paper by Elisha Harris, A. M., M. D., of New York, on Hygiene and the Higher Researches of Science. Election of Officers. Introduction of president elect.

ERRATUM.—Page 318, No. 9, read Richmond, Va., instead of Richmond, Mass.

BOOKS AND PAMPHLETS RECEIVED.—Clinical Medicine. A Systematic Treatise on the Diagnosis and Treatment of Diseases. Designed for the Use of Students and Practitioners of Medicine. By Austin Flint, M. D., etc., etc. Philadelphia: Henry C. Lea. 1879. (From A. Williams & Co.)

Proceedings of the Connecticut Medical Society, 1879. Eighty-Eighth Annual Convention, held at Hartford, May 28th and 29th. C. W. Chamberlain, M. D., Secretary. Hartford. 1879.

Announcement and Catalogue of the National Medical College of the Columbian University. Washington, D. C.

The Medical Department of the University of Georgetown, District of Columbia.

Transactions of the College of Physicians of Philadelphia. Third Series. (Recoveries from Mental Diseases, by Isaac Ray, M. D.; Ulcerative Endocarditis, etc., by John M. Keating, M. D.; Gun-Shot Wound of Abdomen, etc., by J. Ewing Mears, M. D.)

The Yellow Fever Germ on Coast and Inland. A Discussion of Ship and Railroad Quarantine. By Henry Fraser Campbell, M. D., Augusta, Ga. (Medical Association of Georgia.)

Notes of Hospital and Private Practice. By Henry Gibbons, Sr., M. D. (Reprint.)

Materia Medica and Therapeutics. Vegetable Kingdom. By Charles Phillips, M. D., F. R. C. S. E., Lecturer on Materia Medica at Westminster Hospital, London. Edited and adapted by Henry G. Piffard, A. M., M. D. New York: William Wood & Co. 1879.

A Treatise on Hygiene and Public Health. Two Volumes. Edited by Albert H. Buck, M. D., etc., etc. New York: William Wood & Co. 1879.

Some Points connected with the Question of Responsibility as it relates to the Partially Insane. By T. L. Wright, M. D.

Asthma: Its Pathology and Treatment. By J. B. Berkart, M. D., etc., etc. London: J. and A. Churchill.